

# NEVADA TAHOE CONSERVATION DISTRICT

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FY 2009 ANNUAL REPORT July 1<sup>st</sup>, 2008 to June 30<sup>th</sup>, 2009



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# **MISSION STATEMENT**

"TO PROMOTE THE CONSERVATION AND IMPROVEMENT OF THE LAKE TAHOE BASIN'S NATURAL RESOURCES BY PROVIDING LEADERSHIP, EDUCATION AND TECHNICAL ASSISTANCE TO ALL BASIN USERS."

# **VISION STATEMENTS**

# **Organization**

"TO BE A HIGHLY RESPECTED AND EFFECTIVE CONSERVATION ORGANIZATION IN THE LAKE TAHOE BASIN WITH SUFFICIENT AND SUSTAINED FUNDING TO MEET OUR CONSERVATION EFFORTS."

# **Natural Resource**

"A NEVADA LAKE TAHOE BASIN WHERE NATURAL RESOURCES AND NATURAL BEAUTY ARE PROTECTED AND ENHANCED IN HARMONY WITH THE USE AND ENJOYMENT OF RESIDENTS AND VISITORS."



# **DISTRICT SUPERVISORS\***

# SUPERVISORS – EXECUTIVE COMMITTEE Glen Smith, Chair Barbara Perlman-Whyman, Vice Chair Cary Sarnoff, Secretary/Treasurer

# **SUPERVISORS**

Dan St. John
Lynn Endicott
Chris Freeman, Representing Carson City
Nancy McDermid, Representing Washoe and
Douglas Counties

\*NTCD Board of Supervisors as of June 30th, 2009



# **KEY DISTRICT STAFF**

**DOUG MARTIN – DISTRICT MANAGER** 

MARK THORPE – ADMINISTRATOR

SCOTT BROWN - PROGRAM MANAGER, WATER RESOURCES GROUP

JASON BRAND - PROGRAM MANAGER, BACKYARD CONSERVATION GROUP



# INTRODUCTION

#### Nevada Tahoe Conservation District

The Nevada Tahoe Conservation District (NTCD) is one of approximately 3,000 Conservation Districts functioning in all 50 States and U.S. Territories. Conservation Districts are subdivisions of State government and are unique locally led conservation agencies. Districts provide resource management and technical assistance to land occupiers (owners, renters, and producers) as well as work cooperatively with Federal, State, and Local governments in the delivery of conservation programs.

The Nevada Tahoe Conservation District is one of 28 Conservation Districts functioning under the auspices of Nevada Revised Statute, Chapter 548. The District is a Governmental Subdivision of the State of Nevada and a public body corporate created in 1976. Prior to July 1<sup>st</sup>, 1976 the land area that now makes up the NTCD was part of a larger Conservation District known as the Tahoe Verdi Conservation District. Local leaders realized the unique natural resource issues of the Lake Tahoe Basin and realigned District boundaries to create the NTCD. They believed the realignment would allow for more effective conservation management of Lake Tahoe's natural resources. Now the District encompasses all of the land in the Lake Tahoe Basin residing in the State of Nevada including portions of Douglas and Washoe Counties and the Carson City Rural Area.

The Nevada Tahoe Conservation District (NTCD) is Nevada Lake Tahoe's local conservation agency and source for technical assistance in the areas of erosion and conservation management. The District is a non-regulatory and grant funded agency that works closely with its Federal, State, and Local partners to deliver conservation programs to the Nevada Lake Tahoe Community. The District is guided by a Board of Supervisors made up of elected and appointed community leaders. The Board of Supervisors provides direction to the District's full time staff in carrying out the District's mission statement, vision statements, and guiding principles. As described in our mission statement, the District seeks to provide its constituents with superior technical assistance, educational resources, and conservation leadership with the goal of protecting Lake Tahoe's natural resources.



# DISTRICT ADMINISTRATION AND OPERATIONS

Fiscal Year 2009 proved to be another very successful and busy year for the District in terms of administration and operations. Accomplishments throughout the year focused on developing relationships with Fire Defensible Space Programs and Forest Health Programs within and outside the basin. To that end, the district assisted both Nevada Tahoe Fire Protection Districts with technical tours and assimilation of erosion and fire protection programs through enhanced communications and outreach. In addition, the district has become involved with the University of Nevada, Cooperative Extension, Living with Fire Guidelines.

Included in our accomplishments during the past year was the completion of the FY 2008 audit with an excellent rating. The audit showed a financial outlook for the District which continues to reflect a financial position of accountability. Internal controls are in place to insure the solvency of the District's funds. There were some audit findings, with corrective action taken in FY 2009 on all findings. The District also met all of its obligations to GASB 34 reporting requirements.

The District is in the process of applying for its Indirect Cost Rate with the Department of the Interior for the year 2009 and 2010. The rate is expected to remain approximately 30%, which is the current rate, and will be applied to new grants as they are developed.

Other administration and operations accomplishments for fiscal year 2009:

- Successfully held twelve regular board meetings and three special board meetings
- Approved a number of Policy and Procedures
- Participation in national and state conservation programs
- Selection to participate in Urban Conservation Roundtables nationwide.
- Selection to participate in a steering committee to establish FDS/CD interface
- Successfully completed three community grants from Carson City, Washoe and Douglas County
- Revised the District's organizational chart
- Successfully met all deliverable requirements of the Conservation Commission

District Staff and Supervisors continued to provide support for the NvACD: helped to coordinate and provide support for the November 2008 annual meeting in Jackpot, Nevada, and participated at the National meeting in February, 2009.



# **PROGRAMS**:

# WATER QUALITY AND EROSION CONTROL PROGRAM

#### PROGRAM OVERVIEW:

Scientists, researchers, and water quality specialists in the Lake Tahoe Basin have identified untreated stormwater runoff, eroding soils, and impaired or disturbed stream environment zones (SEZ) as key threats to the water quality of Lake Tahoe. The District's Water Quality and Erosion Control (WQEC) Program is focused on identifying and correcting areas where point and non-point source pollution from stormwater runoff, eroding soils, and impaired SEZs are negatively impacting the quality of Nevada Lake Tahoe surface and ground waters.

In partnership with the Nevada Division of State Lands (NDSL) and other basin agencies, the District identifies and prioritizes critical areas and projects. Once projects have been identified, the District works diligently to assist project proponents in obtaining funding from Federal, State, and Local sources to design and construct the projects. During design, the District, NDSL, and the Natural Resources Conservation Service (NRCS) provide technical oversight to ensure the project meets the natural resource, water quality, and community objectives of the WQEC Program.

#### Fiscal Year 2009 ACCOMPLISHMENTS NDSL CONTRACT:

NTCD, in partnership with NDSL, successfully implemented one project and completed engineering on another project under the WQEC Program. NTCD coordinated the thirteenth round of funding for the State of Nevada WQEC Grants program recommending one project receive state funding.

Projects funded through this program focus primarily on erosion control, storm water runoff, and stream environment zone restoration. The cooperative effort between NTCD and NDSL has led to design and implementation work on the following projects:

Design Work in FY '09 Crystal Bay Phase 2b Third Creek Restoration Implementation Work FY '09 Crystal Bay Phase 1b and 2a



#### Fiscal Year 2009 ACCOMPLISHMENTS USDI BUREAU OF RECLAMATION GRANTS:

The Bureau funded the construction of the Area F restoration on Rosewood Creek (below College Dr. and above Village Blvd). NTCD administered the construction contract through to final payment.



Rosewood Creek restored outfall

In December 2008 the Bureau provided additional grant funds to begin detailed engineering on Area A of Rosewood Creek (between SR28 and Northwood Blvd. in Incline Village). The preliminary 50% design was formally presented by Valley and Mountain Consulting on 1 July 2009. Construction is anticipated to begin in August 2010 and finish in 2011 if additional funding is secured.



## MONITORING PROGRAM

#### **PROGRAM OVERVIEW:**

NTCD's environmental monitoring program is designed to provide answers to the scientific and natural resource questions of Lake Tahoe's resource managers. The program delivers these answers by the following means:

- Evaluation of environmental restoration projects
- Inventory of Basin-wide project accomplishments
- Assessment of surface water infiltration
- NDEP compliance monitoring
- Stream health and water quality
- Advanced surface water treatment system

#### Fiscal Year 2009 ACCOMPLISHMENTS:

A monitoring station with auto-sampler and solar power continues to collect data on upper portion of middle Rosewood Creek to determine background concentrations prior to implementation of the SEZ restoration project. We have joined forces with DRI to combine data from their two monitoring stations on lower Rosewood Creek. The collaborative arrangement means we jointly manage the three sample sites with funding from NDSL and USFS.

District staff completed the final report of the low-cost monitoring on lower Mill Creek examining surface and groundwater hydrology, and short term geomorphological changes of the creek channel. The study was implemented in response to home owner concerns that the reintroduction of continuous flow to Mill Creek (the Mill Creek by-pass project was completed 15 Oct 2006) would increase groundwater levels and erosion. The final report was distributed to all home owners and Bureau and all monitoring equipment was removed.

Generation II of the Cultured Ecologies study was fully operational at an existing stormwater basin was selected at the corner of County Club and Village Blvd in Incline Village in February 2008 and completed its operation in November 2008. The final report has not been received before 1 July 2009.

Lake Village water quality monitoring was complete in March 2008 and the final draft report was submitted to the US Forest Service in late June 2009.

In October 2008 NDSL and USFS provided funding for a study of the effectiveness of street sweepers in Incline Village. Teaming with DRI, NTCD implemented a comprehensive sampling protocol to determine the sweeper efficiency, impact on water and air quality. The study is scheduled to last one year.





Sampling for sweeper efficiency on Village Blvd.

Water quality sampling for storm and spring snow melt events continues for the Stateline Stormwater Association. The contract includes monthly sampling to ensure NDEP permit compliance.

Glenbrook HOA sought to validate the combined treatment of runoff from public (GHOA) property and private residences. The first phase of that study was completed in January 2009 with TRPA permitting residential and public stormwater discharge to the adjacent meadow in March 2009. NTCD has removed all groundwater monitoring, but is continuing surface water quality monitoring at three locations for another year. This project should be complete by February 2009.

The Lake Forest stream water quality monitoring in Placer County was renewed for another year in November 2009, but in December 2009 the project was suspended due to the California budget crisis. In May some funding was restored and in June some limited monitoring was reinitiated. NTCD will continue monitoring two stream sites down stream of the construction area for as long as possible until the construction activity disrupts the site. As a result of this change, DRI, UNR, and TRCD contracts were not renewed.

The BMP inventory is largely complete in that project data has been collected for all entities around the lake. Some ground truthing efforts will receive additional USFS funding and extend the project until late 2009 when a final report is expected.



# **BACKYARD CONSERVATION PROGRAM**



BACKYARD CONSERVATION PROGRAM and CONSERVATION PLANNING GROUP

#### **Program Overview:**

The Nevada Tahoe Conservation District, in cooperation with the USDA Natural Resources Conservation Service (NRCS) and Nevada Division of Environmental Protection (NDEP) provides private landowners with conservation education, technical assistance, and whole parcel conservation plans through the Backyard Conservation Program (BCP). Conservation plans for private parcels include recommendations for runoff management and stormwater treatment, slope stabilization, soil protection, noxious weed removal, re-vegetation with native and adapted plants, water and fertilizer management, pest management, wildlife habitat improvements, forest management and reduction of fire hazards. NTCD promotes the program through a Community Watershed Planning process in individual communities that include workshops, educational publications, and on-site visits with homeowners.

The Backyard Conservation Program enables property owners to implement effective land management, reducing sediment and nutrient impacts on water quality in Lake Tahoe. The program also assists landowners to comply with local ordinances and Basin-wide water quality strategic plans such as the Environmental Improvement Program's project number 16: Best Management Practices (BMP) Retrofit Program.

#### Fiscal Year 2009 Accomplishments:

During FY 2009 the Backyard Conservation Program continued to expand the technical assistance and services provided by the program. A number of program goals were achieved during the year.

The BCP has been successful in securing funding for the 2010 fiscal year. Primary sources of funding include USDA Natural Resources Conservation Service (NRCS),



Nevada Division of Environmental Protection (NDEP), Nevada Division of Forestry and Nevada Division of State Lands (NDSL).

One of the important accomplishments was the continued development of the North Lake Tahoe Demonstration Garden (NLTDG). During the past fiscal year in 2009, NTCD organized many classes and events at the garden. NTCD is currently working with the NLTDG to plan next season's activities and to finish some of the garden's development. This last season several different turf demonstration plots were planted and are currently showing different types of grasses that can be used. The garden is now close to being complete and offers visitors great physical examples of properly installed and maintained BMPs.

The Conservation Planning Group (CPG) has been working on the National Forest Foundation (NFF) since the grant proposal was approved. The Sierra Nevada Alliance is the lead for the grant with CPG's Eric Winford head of coordination. This grant pays for the CPG to help the community around the Angora Burn area conduct forest restoration activities. Following the current outreach and education efforts, local citizens and community groups will participate in restoring up to 105 National Forest System urban intermix parcels located within and adjacent to the subdivisions most heavily impacted by the Angora Fire. Citizens will be trained to plant and maintain approved vegetation in these urban parcels. CPG Eric Winford who is lead on this project has met with other partner groups on several occasions to work on planning and the development of a winter work plan. All planting days are now complete and seen by all as a great success. Monitoring and follow up activities will continue through this field season.







The Conservation Planning Group has also been working on deliverables for the "Invasive Weed Abatement" grant from the Nevada Division of State Lands' "Lake



Tahoe License Plate Program". Through this grant the NTCD hired a private contractor to conduct the treatment and mapping of invasive weeds with in the right of way with in Washoe County and Nevada State Parks lands of the Lake Tahoe Basin. For Invasive Weed Treatment in Douglas County the NTCD has entered into an agreement with Douglas County to pay for the work completed by their staff in the Lake Tahoe Basin. The BCP has worked with NDSL and successfully implemented this work and scope over the past four field seasons which has successfully treated large areas of invasive weeds within the "right of way" on the Nevada side of Lake Tahoe's basin.





Invasive Weeds - Bull Thistle and Skeleton Weed (Found recently for the first time in the Tahoe basin)

Another achievement for NTCD's BCP, within the Conservation Planning Group (CPG), was working deliverables and planning for the National Fish and Wildlife foundation (NFWF) grant. The funds were used for education/outreach, training, control and eradication of invasive weeds. The grant was closed during the winter and was a great success to reach a large amount of property owners.

The CPG was awarded a contract with the Sierra Nevada Alliance for a grant that provided funds to conduct non-point source control training. The CPG organized the one day training event in November of 2008. The objective was to train ~20 watershed coordinators from the Sierra Nevada Mountain Range on the need, design and proper implementation of BMPs (non-point source control).

This summer BCP staff taught a Best Management Practices Course at Sierra Nevada College and a separate class at the Lake Tahoe Community College. These courses examined the regulations, importance, and implementation of Best Management



Practices in the Tahoe Basin. This is not the first time we have coordinated these types of classes but the need still remains. The classes were well received with future classes being looked into.

The CPG continued working on BMP Monitoring Program. The CPG examines BMP effectiveness of private residential BMPs. This project is designed to test the construction of BMPs, long-term effectiveness of BMPs and the physical hydrology metrics within these systems. Three main questions to be answered through monitoring are: (1) Was the BMP constructed and installed according to the recommendations given by NTCD? (2) How effective was the BMP at capturing, infiltrating and treating storm runoff? (3) What maintenance needs and requirements are necessary to uphold BMP functionality through time? During the fall of 2009 the CPG will finish field assessments and write up results.





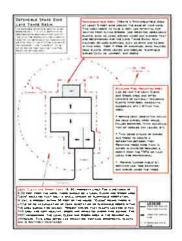
Nevada Division of Environmental Protection - Educational Outreach Video on TMDL Implementation, BMPs and Defensible Space (NDEP Video) is moving along and nearly complete. This grant pays for the CPG to collaborate with other partners and plan a film and outreach video with focus on the importance of the TMDL. The TAC worked with E-Motion (the contractor) to make final edits and complete the script. CPG's Eric Winford has attended many meetings with other groups to identify the focus and guide the contractor in their efforts. The CPG is working with E-Motion on the filming and locations of shots. Final edits are being conducted.

The Nevada Division of Environmental Protection - Reducing Our Impact through Community Education and Best Management Practices (NDEP - Carson Valley) was funded and work has started. This project provides CPG staff time to aid in the



reduction of NPS pollution through the implementation of community based education, hands-on training, and implementation of best management practices (BMPs) in the Carson River Watershed. The integrated components of the program include: a) community outreach campaign utilizing local media sources; b) development of a publication with useful information on such topics as NPS pollution, floodplains, and tips on how to build on and/or landscape properties in ways that save water, reduce run-off and help protect from fire and flooding; c) technical assistance and hands-on training for permanent BMPs for property owners; and d) training for county staff and conservation districts on the design and implementation of BMPs to enable the continuation of this program and add potential funding and program opportunities to local conservation districts.

In an effort to be consistent with recommendations the NTCD, NTCD, NRCS and TRPA - BMP evaluators continued to work on collaboration with the Fire Protection Districts and Fire Safe Council Chapters. Together the groups have identified different options for working together and for delivering the same message to homeowners and public on current Fire Defensible Space recommendations. BMP Evaluators and Fire Defensible Space Evaluators are now using the current "Living with Fire" Guidelines when making recommendations for Fire Defensible space and BMPs. Conservation Districts now hand out information with site plans about the FDS zones.





The Tahoe Regional Planning Agency (TRPA) has mailed a total of 464 enforcement letters to residents within the priority one watershed in Incline Village. In accordance with our agreement with the TRPA, NTCD's BCP provides technical assist with enforcement properties again for the 2009 field season. BCP staff has assisted 176 properties with full BMP Site Evaluations and 71 properties with Technical Assistance.



The BCP has assisted 247 enforcement properties in all and visited some of these properties several times.

The BCP staff helped coordinate and present information at the 2009 Contractors Workshop at Lake Tahoe Community College and the Contractors Refresher Workshop at TRPA. Presentations were given to contractors on the correct techniques and technology for proper installation of BMPs. The target audience is professionals who install BMPs. The CPG coordinated the outdoor session this year. The Contractors Workshop had 75 Participants, 6 Vendors, 27 Speakers, Agency Staff and Comps = 108 total. The Refresher Workshop had 44 Participants, 16 Speakers & panel = 60 total



Another important accomplishment of the past year includes completion of **373** BMP site evaluations (source control with site constraints and full storm water infiltration), facilitation of BMP implementations on **207** private residences resulting in a Final Certificate issued from TRPA, **253** homeowners received technical assistance over the phone and the delivery of technical assistance to **511** homeowners on a variety of conservation issues. The total assistance provided is over **1,344** contacts with homeowners.

During FY 2009 the program continued to emphasize the importance of multi-resource conservation planning. The following are examples of projects and priorities implemented by the District during Fiscal Year 2009:

- Continues Community Watershed Planning in the Kingsbury General Improvement District and Glenbrook communities.
- Continued expansion of Program to shift focus from stormwater BMPs to Conservation Planning and forest health.



### COMMUNITY PARTNERSHIPS

During Fiscal Year 2009, funding was provided by each of the three local county governments within NTCD's boundaries to support NTCD's conservation efforts. The funds provided by Douglas and Washoe Counties, and Carson City has and will continue to be essential to NTCD operations.

#### DOUGLAS COUNTY BOARD OF COMMISSIONERS

NTCD applied for and received a community grant from the Board of Douglas County Commissioners. In addition, the county was successful in transferring \$20,000 to the district from TRPA to support the stormwater utility district project.

#### **CARSON CITY BOARD OF SUPERVISORS**

NTCD also applied for and received a community grant from the Carson City Board of Supervisors. Although there are very few developed areas within the Carson City Rural Area, the Board of Supervisors has recognized the benefits of protecting Lake Tahoe Basin natural resources, for the thousands of residents and visitors who vacation and recreate in the basin. The District has contacted the City regarding supporting their engineering department with residential BMP information.

#### WASHOE COUNTY BOARD OF COMMISSIONERS

The Board of Washoe County Commissioners also granted NTCD funding. Along with a financial award Washoe County also provides NTCD with legal support through its District Attorneys office. During the past year the District worked closely with the District Attorney's office to develop cooperative agreements and contracts which were used to provide funding to many of our local partners.

THE FUNDING PROVIDED BY WASHOE AND DOUGLAS COUNTIES AND CARSON CITY IS AN ESSENTIAL PART OF THE NEVADA TAHOE CONSERVATION DISTRICT'S ABILITY TO CONTINUE OPERATIONS AND WE CAN NOT THANK THEM ENOUGH FOR THEIR SUPPORT.



#### **LOCAL SUPPORT**

Several GIDs and HOAs provided financial support to assist with a special study regarding the creation of a stormwater district. Those supporters included Kingsbury GID, Roundhill GID, Skyland GID, Cave Rock GID, Logan Creek HOA and Glenbrook HOA.



# OTHER PARTNERS

NTCD is involved in several other partnerships in addition to our Community Partnerships. NTCD currently has Memorandums of Understanding with the USDA Natural Resources Conservation Service, the United States Environmental Protection Agency, the Nevada Division of Environmental Protection, the Nevada Division of State Lands, and the Tahoe Regional Planning Agency. We are fortunate to have such a diverse and engaged group of partners who are dedicated to natural resource issues at Lake Tahoe.

Working groups are also an important partnership NTCD is actively involved with. Our current participation includes:

- Lake Tahoe Interagency Monitoring Program
- Lake Tahoe Environmental Education Coalition
- Lake Tahoe Weed Coordinating Group
- Stormwater Quality Improvement Committee
- Nevada Tahoe Water Suppliers Association
- TRPA Pathway Technical Working Groups
- TRPA Pathway Forum
- Lake Tahoe Federal Advisory Committee
- Nevada Stormwater Association
- Tahoe Interagency Executive Committee
- Nevada Fire Safe Council
- Washoe Tribe of Nevada
- UNCE
- Parasol Foundation
- Bonanza Community Meeting Forum
- Nevada Biomass Working Group



# **FUNDING**

Nevada Tahoe Conservation District funding during FY 2009 was provided by Local, State and Federal partners including:

#### LOCAL

Washoe County **Douglas County** Carson City Lake Village HOA Placer County, CA Glenbrook HOA Cave Rock, GID Round Hill, GID Kingsbury, GID

#### STATE

**NV Division of State Lands NV Division of Conservation Districts** NV Division of Environmental Protection

#### **FEDERAL**

**USDI** Bureau of Reclamation USDA Natural Resource Conservation Service Stateline Stormwater Association **USDA Forest Service** 

#### **Private**

Sierra Colina **Private Agreement** 

A comprehensive overview or the District's finances is available in our FY - 2008 annual audit. A copy of which is available at the district or the offices of the Nevada **Division of Conservation Districts**